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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/531,076	03/18/2000	Geoffrey B. Rhoads	60138	5497

23735   7590   02/03/2009

DIGIMARC CORPORATION
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EXAMINER
ZIA, SYED

ART UNIT	PAPER NUMBER
2431	

MAIL DATE	DELIVERY MODE
02/03/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on _11 September 2008_.
2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _1,3-5 and 17-40_ is/are pending in the application.
      4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) _1,3-5 and 17-40_ is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
      Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
      Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
      a) ☐ All   b) ☐ Some *   c) ☐ None of:
      1. ☐ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____.
      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
      Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
      Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This office action is in response to remarks filed on September 11, 2008. Claims are 1, 3-5, and 17-40 are pending.

Response to Arguments

Applicant's arguments with respect to claim are 1, 3-5, and 17-31 have been considered but are moot in view of the new ground(s) of rejection.

Allowable Subject Matter

Claim 1, 2-5, and 32-40 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 101, set forth in this Office action.

Claim Rejections - 35 USC § 101

1.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2.   Claims 1, 3-5, and 17-40 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

3.   Claims 24-31 are rejected under 35 U.S.C. 101 as directed to non-statutory subject matter

of software, per se. The claim lacks the necessary physical articles or objects to constitute a

machine or manufacture within the meaning of 35 U.S.C. 101. As such, they fail to fall within a

statutory category. It is at best, function descriptive material per se. Merely claiming descriptive

material, i.e., abstract ideas, stored on a computer-readable medium, does not make it statutory.

See Diehr, 450 U.S. at 185-86, 209 USPQ at 8

        Descriptive material can be characterized as either "functional descriptive material" or

"nonfunctional descriptive material." Both types of "descriptive material" are non-statutory

when claimed as descriptive material per se, 33 F.3d at 1360, 31 USPQ2d at 1759. It is

suggested, when functional descriptive material is recorded on some computer-readable medium,

it becomes structurally and functionally interrelated to the medium and will be statutory in most

cases since use of technology permits the function of the descriptive material to be realized.

Compare In re Lowry, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994).

4.   Claims 3-5, and 32-40 are not statutory because they are directed towards a system

comprising information stored in digital objects which could be implemented via software alone.

Claims to software per se are not statutory. Applicant must recite some form of hardware as part

of the claimed system to overcome this rejection.

5.   Claims 1, 3-5, 17-40 are rejected under 35 U.S.C. 101 based on Supreme Court precedent

and recent Federal Circuit decisions, a 35 U.S.C § 101 process must (1) be tied to a particular

machine or (2) transform underlying subject matter (such as an article or materials) to a different

state or thing. In re Bilski et al, 88 USPQ 2d 1385 CAFC (2008); Diamond v. Diehr, 450 U.S.

175, 184 (1981); Parker v. Flook, 437 U.S. 584, 588 n.9 (1978); Gottschalk v. Benson, 409 U.S.

63, 70 (1972); Cochrane v. Deener, 94 U.S. 780,787-88 (1876).

An example of a method claim that would <u>not</u> qualify as a statutory process would be a

claim that recited purely mental steps. Thus, to qualify as a § 101 statutory process, the claim

should positively recite the <u>particular machine to which it is tied</u>, for example by identifying the

apparatus that accomplishes the method steps, or positively recite the subject matter that is being

transformed, for example by identifying the material that is being changed to a different state.

Here, applicant's method steps are not tied to a particular machine. Thus, the claims are

non-statutory.

The mere recitation of the machine in the preamble with an absence of a machine in the

body of the claim fails to make the claim statutory under 35 USC 101. *Note the Board of Patent*

Appeals Informative Opinion Ex parte Langemyer et al.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

1.   Claims 17-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weiss (U.

S. Patent 7,065,559), and further in view of Madsen (U. S. Patent 6,941,338).

3.   Regarding Claim 17 Weiss teaches and describes in a method of linking from physical

objects to corresponding electronic resources (Fig.1-4,and col.3 line 12 to col.8 line 55), the

method including decoding object payload [bridge code 154] data from a machine readable

[scanning] feature associated with a physical object [media object 150] (col.6 line 26 to line 33,

and col.5 line 45 to line 60), querying a database [database 22] with at least some of said payload

data [bridge code 154] to obtain address information associated with said physical object (col.6

line 57 to col.7 line 10); and initiating an electronic link based on said obtained address

information (col.7 line 12 to line 45); an improvement comprising foreseeing information about

object payloads that may be forthcoming but that do not share the first object the payload data

with which the database was queried [such as recipe, coupon, author web site] (col.7 line 57 to

line 67); and anticipatory sending address information associated with such foreseen payloads

data sending address information associated with the first physical object wherein address

information associated with other physical objects - but not associated with the first physical

object - are sent in expectation that such other physical objects may thereafter be sensed [such as

recipe, coupon, author web site] (col. 7 line 48 to col.8 line 17).

        Although the system disclosed by Weiss shows all the features of the claimed limitation,

of for linking between objects and associated remote resources, as well as linking user the

subject matter of tangible media with related subject matter in media stored on a computer or

related actions accomplished by a computer, but Weiss does not specifically disclose in detail

sending anticipatory sending address information associated with such foreseen payloads.

In an analogous art, Madsen, on the other hand discloses computing environment that relates to an anticipatory cache management system which is associated with each base station. The anticipatory cache management stores files regularly requested by the remote unit within the coverage area of the corresponding base station. In response to request of uniquely identified object information, another computer is accessed where lookup operation is done to match object identification code, for obtaining other unique remote object information. Remote locations are accessed based on routing information (Madsen: col.5line 35 to line 52).

Therefore, It would have been obvious to one ordinary skilled in the art at the time of invention to combine the teachings of Weiss and Madsen, because Madsen's system of anticipatory pre-fetching when a file or object is retrieved and stored in the cache before the users request it, would not only provide the uniquely identified and logically related other objects information as requested by the user in the system of Weiss when encounter the first object information for linking between first object and logically associated remote resources, but will also enhance services and features that may be employed to establish communication between a user and external network to locate logically related object information stored in database for anticipatory caching(Madsen: col.5 line 53 to col.6 line 7).

4.   Regarding Claim 23 Weiss teaches and describes a method Fig.1-4,and col.3 line 12 to col.8 line 55) comprising:

        - sensing [scanning] an object identifier [bridge code 154] from a first object computer system 30, PDA 38, media object 150] (col.6 line 26 to line 33, and col.5 line 45 to line 60);

sending said first object identifier [bridge code 154] from a first device to a second

device [Bridge Server 20] (col.6 line 57 to col.7 line 10);

in response, at said second device[Bridge Server 20], identifying address information

corresponding to said first object identifier and sending same to the first device (col.7 line 12 to

line 45); initiating a link from the first device in accordance with said address information at said

second device, (col.7 line 12 to line 45);

after initiating said link, identifying additional objects related [such as recipe, coupon,

author web site] to said first object; identifying additional address information corresponding to

said additional objects; and sending said additional address information to the first device (col.7

line 57 to line 67); storing said additional address information in a memory at the first device;

wherein, if an object included among said identified additional objects is sensed by the first

device, the corresponding address information can be retrieved from said memory in the first

device without the intervening delays of communicating with the second device (col. 7 line 48 to

col.8 line 17).

Although the system disclosed by Weiss shows all the features of the claimed limitation,

of for linking between objects and associated remote resources, as well as linking user the

subject matter of tangible media with related subject matter in media stored on a computer or

related actions accomplished by a computer, but Weiss does not specifically disclose in detail

sending anticipatory sending address information associated with such foreseen payloads.

In an analogous art, Madsen, on the other hand discloses computing environment that

relates to an anticipatory cache management system which is associated with each base station.

The anticipatory cache management stores files regularly requested by the remote unit within the

coverage area of the corresponding base station. In response to request of uniquely identified

object information, another computer is accessed where lookup operation is done to match object

identification code, for obtaining other unique remote object information. Remote locations are

accessed based on routing information (Madsen: col.5line 35 to line 52).

Therefore, It would have been obvious to one ordinary skilled in the art at the time of

invention to combine the teachings of Weiss and Madsen, because Madsen's system of

anticipatory pre-fetching when a file or object is retrieved and stored in the cache before the

users request it, would not only provide the uniquely identified and logically related other

objects information as requested by the user in the system of Weiss when encounter the first

object information for linking between first object and logically associated remote resources, but

will also enhance services and features that may be employed to establish communication

between a user and external network to locate logically related object information stored in

database for anticipatory caching(Madsen: col.5 line 53 to col.6 line 7).

Regarding Claim 24 Weiss teaches and describes a method of linking from physical

objects to corresponding electronic resources (Fig.1-4,and col.3 line 12 to col.8 line 55), the

method including decoding object payload [bridge code 154] from a machine readable feature

[scanning] associated with a physical object [tangible media object 150] (col.6 line 26 to line 33,

and col.5 line 45 to line 60) querying a database [Database 22] with at least some of said payload

data to obtain address information associated with said physical object (col.6 line 57 to col.7 line

10); and initiating an electronic link based on said obtained address information(col.7 line 12 to

line 45); an improvement comprising foreseeing information about object payloads [such as

recipe, coupon, author web site] that may be forthcoming (col.7 line 57 to line 67); and

anticipatorily sending address information associated with such foreseen object payloads after

initiating said electronic link (col. 7 line 48 to col.8 line 17).

Although the system disclosed by Weiss shows all the features of the claimed limitation,

of for linking between objects and associated remote resources, as well as linking user the

subject matter of tangible media with related subject matter in media stored on a computer or

related actions accomplished by a computer, but Weiss does not specifically disclose in detail

sending anticipatory sending address information associated with such foreseen payloads.

In an analogous art, Madsen, on the other hand discloses computing environment that

relates to an anticipatory cache management system which is associated with each base station.

The anticipatory cache management stores files regularly requested by the remote unit within the

coverage area of the corresponding base station. In response to request of uniquely identified

object information, another computer is accessed where lookup operation is done to match object

identification code, for obtaining other unique remote object information. Remote locations are

accessed based on routing information (Madsen: col.5line 35 to line 52).

Therefore, It would have been obvious to one ordinary skilled in the art at the time of

invention to combine the teachings of Weiss and Madsen, because Madsen's system of

anticipatory pre-fetching when a file or object is retrieved and stored in the cache before the

users request it, would not only provide the uniquely identified and logically related other

objects information as requested by the user in the system of Weiss when encounter the first

object information for linking between first object and logically associated remote resources, but

will also enhance services and features that may be employed to establish communication

between a user and external network to locate logically related object information stored in

database for anticipatory caching(Madsen: col.5 line 53 to col.6 line 7).

5.   Regarding Claim 30 Weiss teaches and describes a method of linking from physical

objects to corresponding electronic resources (Fig.1-4,and col.3 line 12 to col.8 line 55), the

method including decoding object payload data [bridge code 154] from a machine readable

feature associated with a physical object [media object 150] (col.6 line 26 to line 33, and col.5

line 45 to line 60), querying a database [Database 22]with at least some of said payload data to

obtain address information associated with said physical object (col.6 line 57 to col.7 line 10);

and initiating an electronic link based on said obtained address information (col.7 line 12 to line

45); an improvement comprising foreseeing information about object payloads that may be

forthcoming, and the order in which said other object payloads may be forthcoming [such as

recipe, coupon, author web site], and anticipatorily sending address information associated with

such foreseen object payloads, in such order (col. 7 line 48 to col.8 line 17).

Although the system disclosed by Weiss shows all the features of the claimed limitation,

of for linking between objects and associated remote resources, as well as linking user the

subject matter of tangible media with related subject matter in media stored on a computer or

related actions accomplished by a computer, but Weiss does not specifically disclose in detail

sending anticipatory sending address information associated with such foreseen payloads.

In an analogous art, Madsen, on the other hand discloses computing environment that

relates to an anticipatory cache management system which is associated with each base station.

The anticipatory cache management stores files regularly requested by the remote unit within the coverage area of the corresponding base station. In response to request of uniquely identified object information, another computer is accessed where lookup operation is done to match object identification code, for obtaining other unique remote object information. Remote locations are accessed based on routing information (Madsen: col.5line 35 to line 52).

Therefore, It would have been obvious to one ordinary skilled in the art at the time of invention to combine the teachings of Weiss and Madsen, because Madsen's system of anticipatory pre-fetching when a file or object is retrieved and stored in the cache before the users request it, would not only provide the uniquely identified and logically related other objects information as requested by the user in the system of Weiss when encounter the first object information for linking between first object and logically associated remote resources, but will also enhance services and features that may be employed to establish communication between a user and external network to locate logically related object information stored in database for anticipatory caching(Madsen: col.5 line 53 to col.6 line 7).

6.   Claims 18-22, 25-29, and 31 are rejected applied as above rejecting Claims 3, 17, 24, and 30. Furthermore, system of Weiss and Madsen teaches and describes a system and method (Weiss: Fig.1-4, and col.3 line 12 to col.8 line 55, and Madsen: Fig.3-4, col. 3 line 30 to line 46) wherein:

As per 18, the physical object is a member of a logical set, and the method includes anticipatorily sending address information associated with other objects that are also member of said logical set (col.7 line 46 to col.8 line 17, and Madsen: col.5line 35 to line 52);

As per Claim 19, the logical set comprises of advertisements found in particular

magazine [tangible media object 150] (col.7 line 46 to col.8 line 17, and Madsen: col.5 line 35 to

line 52);

As per Claim 20, foreseeing an order in which other object payloads may be forthcoming,

and anticipatorily sending address information for each object payloads in said (col.7 line 46 to

col.8 line 17, and Madsen: col.5 line 35 to line 52).

As per Claim 21, said order is based on an order of printed pages in a bound volume

(col.5 line 46 to line 59, and col.7 line 5 to line 45, and Madsen: col.5 line 35 to line 52).

As per Claim 22, determining an order in which to send address information associated

with said foreseen object based on a contractual arrangement [conditional information] (col.7

line 56 to col.8 line 17, and Madsen: col.5 line 35 to line 52).

As per Claim 25, the physical object is a member of a logical set, and the method

includes anticipatorily sending address information associated with other objects that are also

members of said logical set [objects, such as recipe, coupon, author web site] (col.7 line 46 to

col.8 line 17, a and Madsen: col.5 line 35 to line 52);

As per Claim 26, the logical set comprises a set of advertisements found in a particular

magazine [tangible media object 150] (col.7 line 46 to col.8 line 17, and Madsen: col.5 line 35

to line 52);

As per Claim 27, includes foreseeing an order in which other object payloads may be

forthcoming [objects ,such as recipe, coupon, author web site], and anticipatorily sending

address information for such object payloads in said order (col.7 line 46 to col.8 line 17, and

Madsen: col.5 line 35 to line 52);

As per Claim 28, said order is based on an order of printed pages in a bound volume (col.5 line 46 to line 59, and col.7 line 5 to line 45, and Madsen: col.5 line 35 to line 52).

As per Claim 29 includes determining an order in which to send address information associated with said foreseen object payloads based on a contractual arrangement [conditional information] (col.7 line 56 to col.8 line 17, and Madsen: col.5 line 35 to line 52).

As per Claim 31, said order is based on an order of printed pages in a bound (col.5 line 46 to line 59 and col.7 line 5 to line 45, and Madsen: col.5 line 35 to line 52).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SYED ZIA whose telephone number is (571)272-3798. The examiner can normally be reached on 9:00 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

sz
January 23, 2009
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Primary Examiner, Art Unit 2431